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Amendments to claims

1 ( currently amended): A fuel cell apparatus comprising:

a fuel cell connected to a load;

an electricity accumulator connected in parallel to said fuel cell ~~via a step-up circuit,~~  
~~said electricity accumulator supplying electric power to said load and being charged by~~  
~~regenerative electric power generated at said load and electric power output from said fuel~~  
~~cell;~~

a step-up circuit provided between said electricity accumulator and said load, for  
increasing voltage output from said electricity accumulator; and

a control circuit for causing said step-up circuit to operate, wherein, when electric  
power that said load requires is greater than a ~~predetermined~~ electric power that said fuel cell  
supplies, ~~said control circuit causes so that~~ said electricity accumulator ~~to output via said step-~~  
~~up circuit~~ outputs electric power corresponding to a difference between the supplied electric  
power ~~required by said load~~ and the ~~predetermined~~ required electric power, to thereby prevent  
said fuel cell from ~~supplying~~ outputting electric power ~~greater than the~~ out of a predetermined  
electric power range.

2 (currently amended): A fuel cell apparatus comprising a fuel cell ~~connected to~~  
~~a load,~~ a load connected to an output terminal of said fuel cell, and an electricity



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accumulation circuit connected in parallel to said fuel cell with respect to said load, wherein said electricity accumulation circuit comprises:

an electricity accumulator;

a step-up circuit for increasing voltage output from said electricity accumulator ~~and for supplying increased voltage~~ to supply electric power to said load;

a charging circuit for supplying electric power output from said fuel cell to said electricity accumulator ~~[[so as]]~~ to charge said electricity accumulator; and

a traveling state detector for detecting a traveling state of a vehicle, wherein

said step-up circuit ~~and said charging circuit are~~ is operated ~~selectively~~ in accordance with the traveling state of the vehicle as detected by said traveling state detector so that voltage output from said fuel cell is, ~~and said step-up circuit is operated in such a manner that said fuel cell outputs electric power within a predetermined range, to thereby supply electric power of said electricity accumulator to said load.~~

3 (currently amended): A fuel cell apparatus comprising a fuel cell connected to a load, an electricity accumulation circuit connected in parallel to said fuel cell with respect to said load, and a diode element disposed for preventing supply of electric power from said load or said electricity accumulation circuit to said fuel cell, wherein said electricity accumulation circuit comprises:

a switching element for charging and a switching element for step-up connected in series;



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an electricity accumulator connected in parallel to said switching element for step-up via a reactor; and

a traveling state detector for detecting a traveling state of a vehicle, wherein

said switching element for step-up ~~and said switching element for charging are~~ is operated ~~selectively~~ in accordance with the traveling state of the vehicle as detected by said traveling state detector, ~~and said switching element for step-up is operated in such a manner that said fuel cell outputs electric power so that voltage output from said fuel cell is within a predetermined range, to thereby supply electric power of said electricity accumulator to said~~ load.

4 (previously presented): A fuel cell apparatus according to claim 1, wherein said load is a drive control unit for a drive motor which drives the vehicle.

5 (previously presented): A fuel cell apparatus according to claim 1, wherein said fuel cell outputs electricity in such a manner that output voltage does not become lower than the lowest generatable voltage, output current does not exceed the maximum generatable current, and output power does not exceed the maximum output power.



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6 (previously presented): A fuel cell apparatus according to claim 1, wherein said electricity accumulator outputs electricity when the electric power that said load requires exceeds the maximum output power of said fuel cell.

7 (previously presented): A fuel cell apparatus according to claim 1, wherein said electricity accumulator outputs electricity when output voltage of said fuel cell becomes lower than the lowest generatable voltage, when output current of said fuel cell exceeds the maximum generatable current, or when output power of said fuel cell exceeds the maximum output power.

8 (previously presented): A fuel cell apparatus according to claim 1, wherein fuel gas is supplied from a fuel storage unit to said fuel cell at constant pressure.

9 (previously presented): A fuel cell apparatus according to claim 1, wherein said fuel cell apparatus further comprises a fuel supply apparatus for supply fuel gas to said fuel cell, said fuel supply apparatus comprising a fuel storage unit, a supply line extending from said fuel storage unit to said fuel cell, and a valve disposed in said line, wherein said valve is operated in such a manner that the fuel gas is supplied to said fuel cell at constant pressure.



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10 (previously presented): A fuel cell apparatus according to claim 8, wherein the fuel gas is supplied in such a manner that the pressure of the fuel gas becomes constant within grooves of fuel electrodes of said fuel cell.

11 (previously presented): A fuel cell apparatus according to claim 8, wherein said line includes a fuel supply line and a fuel discharge line; a fuel supply solenoid valve is disposed in said fuel supply line; and a fuel discharge solenoid valve is disposed in said fuel discharge line, wherein said fuel supply solenoid valve and said fuel discharge solenoid valve are turned on and off in order to regulate the pressure of the fuel gas.

12 (previously presented): A fuel cell apparatus according to claim 8, wherein a fuel pressure regulation valve is disposed in said line and is operated in order to regulate the pressure of the fuel gas.